ATTACHMENT 2

INDEX

TO

SUBCONTRACT SCHEDULE

ARTICLE - TITLE	PAGE
INTRODUCTION	1
AGREEMENT	1
ARTICLE 1 – THE WORK TO BE PERFORMED	1
ARTICLE 2 - COMMENCEMENT, PROSECUTION, AND COMPLET OPTION	
ARTICLE 3 - PRICE, PAYMENTS, INVOICES AND OPTIONS	2
ARTICLE 4 DESIGN/BUILD OPTION – SUBCONTRACTOR'S GUMAXIMUM PRICE	
ARTICLE 5 – APPLICABLE DOCUMENTATION	4
ARTICLE 6 – ORDER OF PRECEDENCE	5
ARTICLE 7 – RIGHTS TO PROPOSAL DATA	5
ARTICLE 8 – SUBCONTRACT ADMINISTRATION RESPONSIBIL	TTIES5
ARTICLE 9 - KEY PERSONNEL AND LOWER TIER SUBCONTRAGAUGUST 2004)	
ARTICLE 10 – PUBLICITY RELEASE AND PUBLIC AFFAIRS	6
ARTICLE 11 - WASTE DISPOSAL	7
ARTICLE 12 - SAFETY AND HEALTH REQUIREMENTS (SPECIAL	L – APRIL 2004)7
ARTICLE 13 - PROGRESS MEETINGS AND REPORTS (APR 2004)	8
ARTICLE 14 - EXISTING SERVICES AND UTILITIES	8
ARTICLE 15 - TEMPORARY STRUCTURES, OFFICES AND WORK	X AREAS9
ARTICLE 16 - RESPONSIBILITIES FOR SUPPLIES AND MATERIA	ALS10
ARTICLE 17 – LIQUIDATED DAMAGES – CONSTRUCTION (SEP	Γ 2000)10
ARTICLE 18 – TIME EXTENSIONS (SEPT 2000)	10
ARTICLE 19 – (LOWER TIER) SUBCONTRACTS (LABOR STAND	ARDS) (FEB 1988) 10
ARTICLE 20 – PERFORMANCE AND PAYMENT BONDS – CONST	TRUCTION11
ARTICLE 21 – PERFORMANCE OF WORK BY THE SUBCONTRAC	CTOR12
ARTICLE 22 - SCHEDULES FOR CONSTRUCTION SUBCONTRAC	CTS12

ARTICLE 23 - LAYOUT	OF WO	RK	12
ARTICLE 24 - SMALL E	BUSINE	SS (LOWER TIER) SUBCONTRACTING PLAN	13
ARTICLE 25 - ALTERA	TIONS 7	TO TERMS AND CONDITIONS	13
ARTICLE 26 – INTEGRA	ATION		16
APPENDICES:			
APPENDIX A	_	STATEMENT OF WORK	
APPENDIX B-*	-	STANDARD TERMS AND CONDITIONS	
APPENDIX C-3	-	INTELLECTUAL PROPERTY PROVISIONS	
APPENDIX D-*	-	CLAUSES FOR SUBCONTRACTS IN ECESS OF \$500,00	00
APPENDIX E	-	TRAVEL POLICIES	
APPENDIX F	_	SMALL BUSINESS (LOWER TIER) SUBCONTRACTIN	G PLAN
APPENDIX G	-	GENERAL WAGE DECISION DECISION NO.	

ATTACHMENT 2

SUBCONTRACT NO. ***-*-****

UNDER

PRIME CONTRACT NO. DE-AC36-99GO10337

CONTRACTING PARTY: MIDWEST RESEARCH INSTITUTE NATIONAL RENEWABLE ENERGY LABORATORY DIVISION **SUBCONTRACTOR: ADDRESS: SUBCONTRACT TITLE:** FIRM FIXED PRICE – DESIGN/BUILD - OPTIONS TYPE OF SUBCONTRACT: **PERIOD OF PERFORMANCE: EXECUTION DATE THROUGH **** SUBCONTRACT AMOUNT: BASIC \$* \$* OPTION 1: OPTION 2: TOTAL **PAYMENT TERMS:** NET 30 **SUBCONTRACTOR'S REMITTANCE NAME**

FUNDED AMOUNT AND TASK CHARGE NUMBER:

AND ADDRESS:

ATTACHMENT 2

SUBCONTRACT NO. ***-*-*****

BETWEEN

MIDWEST RESEARCH INSTITUTE

NATIONAL RENEWABLE ENERGY LABORATORY DIVISION

AND

*

SCHEDULE

INTRODUCTION

THIS SUBCONTRACT is effective upon execution by the Midwest Research Institute, National Renewable Energy Laboratory Division and is between the Midwest Research Institute, acting through its National Renewable Energy Laboratory Division (hereinafter called "NREL") and * (hereinafter called "Subcontractor"), whose principal offices are located in *.

Midwest Research Institute has entered into Contract No. DE-AC36-99GO10337 (hereinafter called "Prime Contract") with the Department of Energy (hereinafter called "DOE"), an agency of the U.S. Government (hereinafter called "Government"), for the operation and management of the National Renewable Energy Laboratory.

This subcontract is entered into in furtherance of the performance of the work provided for in the Prime Contract.

AGREEMENT

NOW, THEREFORE, the parties hereto agree to the following terms and conditions:

ARTICLE 1 – THE WORK TO BE PERFORMED

- A. The Subcontractor shall perform the work generally described as "**", and specifically provided for in Appendix A, Statement of Work, attached hereto and made a part hereof, pursuant to the provisions of this subcontract.
- B. Specific deliverables, quantities, due dates, reporting requirements, and addresses are set forth in Appendix A hereto.

ARTICLE 2 - COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK AND OPTION

A. The Subcontractor shall be required to (a) commence work under this subcontract within ten (10) calendar days of NREL's execution of this subcontract, which execution constitutes NREL's formal

notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than * (*) * after such execution date. The time stated for completion shall include final cleanup of the premises. This subcontract may be extended at NREL's sole discretion for the option specified in this subcontract. This subcontract provides for two (2) options.

- B. If Option No. 1 specified by this subcontract is exercised by NREL, the Subcontractor shall be required to (a) commence work under the option within ten (10) calendar days after the Subcontractor receives NREL's notice to proceed with the option, (b) prosecute the work under the option diligently, and (c) complete the entire work under the option ready for use not later than * (*) * after receipt of such notice to proceed with the option. The time stated for completion of the option shall include final cleanup of the premises.
- C. If Option No. 2 specified by this subcontract is exercised by NREL, the Subcontractor shall be required to (a) commence work under the option within ten (10) calendar days after the Subcontractor receives NREL's notice to proceed with the option, (b) prosecute the work under the option diligently, and (c) complete the entire work under the option ready for use not later than * (*) * after receipt of such notice to proceed with the option. The time stated for completion of the option shall include final cleanup of the premises.
- D. NREL may exercise either option covered by this subcontract by written notice to the Subcontractor within thirty (30) days from the completion date of this subcontract for the basic subcontract or the completion date for this subcontract for the basic subcontract and Option No. 1 if exercised by NREL; provided, that NREL shall give the Subcontractor a preliminary written notice of its intent to extend at least sixty (60) days before the basic subcontract expires or the basic subcontract and Option No. 1, if exercised, expires. Such preliminary notice shall not commit NREL to an extension nor shall failure to provide such notice waive NREL's right to exercise such option(s).
- E. If NREL exercises either option, the extended subcontract shall be considered to include this option provision.
- F. The total duration of this subcontract, including the exercise of the option(s) under this article shall not exceed * (*) *.

ARTICLE 3 - PRICE, PAYMENTS, INVOICES AND OPTIONS

- A. In full consideration of the Subcontractor's performance of this design/build project covered by this subcontract, NREL shall pay the Subcontractor the firm fixed price of \$* for the basic subcontract in accordance with this article, the clause entitled "Payments Under Fixed Price Construction Subcontracts" of Appendix B-*, and other provisions of this subcontract.
- B. This subcontract provides for two options at firm fixed prices, if exercised by NREL, as follows:

Option 1 Firm Fixed Price: \$ *
Option 2 Firm Fixed Price: \$ *

These options are not funded under this basic subcontract. If NREL exercises an option under this subcontract, funding will be provided for that option at that time.

- C. The Subcontractor is hereby authorized to use the NREL tax exempt number ****** for any use or sales tax which would otherwise apply for the acquisition of any materials or equipment that is required in the performance and delivery under this subcontract.
- D. To facilitate processing and payment each invoice must reference the subcontract number which appears on the cover sheet of this subcontract. Payments under this subcontract shall be made to the Subcontractor's remittance name and address shown on the cover sheet of this subcontract.
- E. The payment terms of this subcontract shall mean net days from the date of receipt of an acceptable invoice [including appropriate certification(s) and payroll records]. Final payment by NREL shall be contingent upon completion and acceptance of the base subcontract or if NREL exercised the construction effort required by this subcontract upon completion and acceptance of the construction effort, and receipt by NREL of an appropriately signed "Release of Claims" form from the Subcontractor.
- F. The NREL Subcontract Administrator shall withhold five (5) percent of the amounts due under this Subcontract to protect the interests of NREL and the Government. The amounts withheld under this Article 3 shall be retained until the inspection and acceptance of the construction effort and delivery of a release by the Subcontractor as provided in Paragraph E of this Article. Notwithstanding NREL's right to withhold retainage until achievement of satisfactory progress as set forth in the clause entitled "Payments Under Fixed Price Construction Subcontracts" of Appendix B, NREL shall not retain an amount in excess of 10 percent and shall release retainage in excess of 5 percent upon the NREL Subcontractor Administrator's determination that the Subcontractor has achieved satisfactory progress.
- G. Any payments made under this subcontract shall not be deemed to prejudice any rights that NREL may have by law or under other provisions of this subcontract.
- H. Invoices for work accomplished under this subcontract shall be submitted in an original and two copies, in a form satisfactory to the Subcontract Administrator, accompanied by the "Certificate for Payment" [NREL Form No. 0168 (03/27/92)] to:

National Renewable Energy Laboratory Attn: * 1617 Cole Boulevard Golden, CO 80401-3393

An authorized representative of the Subcontractor shall sign the following certification on each invoice submitted for payment:"I hereby certify, to the best of my knowledge and belief, that (1) the amounts requested are only for performance in accordance with the specifications, terms, and conditions of the subcontract; (2) payments to lower-tier subcontractors and suppliers have been made from previous payments received under this subcontract, and timely payments will be made from the proceeds of the payment covered by this certification, in accordance with lower-tier subcontract agreements and the requirements of Chapter 39 of Title 31, United States Code; and (3) this request for progress payments does not include any amounts which the Subcontractor intends to withhold or retain from a lower-tier subcontractor or supplier in accordance with the terms and conditions of the lower-tier subcontract.

Subcontract No. ***-*-*****

Date"

ARTICLE 4 -- DESIGN/BUILD OPTION – SUBCONTRACTOR'S GUARANTEED MAXIMUM PRICE

Page 4

- A. The Subcontractor guarantees that the total price of the work to be performed under the design/build option of this subcontract shall not exceed \$****.00.
- B. In the event that NREL exercises the subcontract option, the Subcontractor assumes the risk for all costs exceeding the Guaranteed Maximum Price (GMP) necessary to meet NREL's inspection and acceptance of the design/build effort.
- C. Except for costs exceeding the GMP that directly stem from an NREL-directed change to the scope of work to be performed under the design/build option, the Subcontractor guarantees such maximum price regardless of the cause(s) resulting in a price that exceeds the Subcontractor's guaranteed maximum.

ARTICLE 5 – APPLICABLE DOCUMENTATION

In addition to the terms and conditions contained in this Schedule, the following documents are attached hereto and made a part of this subcontract:

- A. Appendix A, entitled "Statement of Work" dated **.
- B. Appendix B-10, entitled "Standard Terms and Conditions" dated 03/06/06.
- C. Appendix C-3, entitled "Intellectual Property Provisions" dated 10/22/98.
- D. Appendix D-1, entitled "Clauses for Subcontract in Excess of \$500,000" dated 11/01/03.
- E. Appendix F, entitled "Small Business (Lower Tier) Subcontracting Plan" dated ***, ****.
- F. Appendix G, entitled "General Wage Decision No. CO030007" dated 02/03/06.
- G. Certificate of Insurance, dated ****.
- H. Performance Bond, dated ****.

- I. Payment Bond, Dated ****.
- J. Subcontractor's technical proposal number (none) dated * together with any revisions, is hereby incorporated by reference. In the event there is a conflict between the Subcontractor's technical proposal and any other provisions of this subcontract, the latter shall prevail.

ARTICLE 6 – ORDER OF PRECEDENCE

Any inconsistency in this subcontract shall be resolved by giving precedence in the following order:

- A. This Schedule;
- B. Statement of Work (Appendix A);
- C. Standard Terms and Conditions (Appendix B-*);
- D. Intellectual Property Provisions (Appendix C-*);
- E. Clauses for Subcontracts in Excess of \$500,000 (Appendix D-1);
- F. Small Business (Lower Tier) Subcontracting Plan (Appendix F);
- G. General Wage Decision No. CO20030007 (Appendix G);
- H. Certificate of Insurance;
- I. Performance Bond; and
- J. Payment Bond;
- K. Other provisions of this subcontract whether incorporated by reference or otherwise; and
- L. The Subcontractor's technical proposal, if incorporated in this subcontract by reference or otherwise.

ARTICLE 7 – RIGHTS TO PROPOSAL DATA

Except for technical data contained on pages (None) of the subcontractor's proposal dated ** which are asserted by the Subcontractor as being proprietary data, it is agreed that, as a condition of the award of this subcontract, and notwithstanding the provisions of any notice appearing on the proposal, the Government and NREL shall have the right to use, duplicate, disclose and have others do so for any purpose whatsoever, the technical data contained in the proposal upon which this subcontract is based.

ARTICLE 8 – SUBCONTRACT ADMINISTRATION RESPONSIBILITIES

A. Signature Authority: This subcontract may only be modified by a formal modification signed by an authorized official of NREL.

- B. Subcontract Administration Responsibilities: The authorized official of NREL has designated ** as the Subcontract Administrator for this subcontract with the responsibilities for subcontract administration and negotiation of any modifications to this subcontract. The Subcontract Administrator's telephone number is 303-**.
- C. Technical Monitoring Responsibilities: The authorized official of NREL has designated ** as the Technical Monitor for this subcontract with the responsibilities of monitoring the technical work or services to be performed under this subcontract. The Technical Monitor does not have the authority to make any commitments or authorize any changes which may affect the subcontract's price, scope of work, terms, or conditions. Any such changes shall be referred to the Subcontract Administrator designated in Paragraph B above. The Technical Monitor's telephone number is 303-**.

ARTICLE 9 - KEY PERSONNEL AND LOWER TIER SUBCONTRACTORS (SPECIAL-August 2004)

A. It having been determined that the individuals, whose names appear below, are necessary for the successful performance of this subcontract, the Subcontractor agrees to assign or have assigned such individuals to the performance of the work under this subcontract and shall not reassign or remove any of them without the consent of the Subcontract Administrator by modification to this subcontract:

Name	Project Title	Telephone No.
****	****	****

B. It having been determined that the lower-tier subcontractors, whose names appear below, are necessary for the successful performance of this subcontract, the Subcontractor agrees to execute lower-tier subcontracts for the performance of work by these companies under this subcontract and shall not remove any of them without the consent of the Subcontract Administrator by modification to this subcontract:

Lower-Tier Subcontractors

****	****	****
****	***	****

C. In the event that any of the designated key personnel is unavailable for assignment or any of the designated lower-tier subcontractors is unavailable to perform work under this subcontract, the Subcontractor shall, with the approval of the NREL Subcontract Administrator, replace such designated individual or lower-tier subcontractor with an individual or lower-tier subcontractor of substantially equal abilities and qualifications.

ARTICLE 10 - PUBLICITY RELEASE AND PUBLIC AFFAIRS

A. Publicity release of any nature in connection with this subcontract shall be coordinated as provided in the "Public Affairs" clause of Appendix B. The Subcontractor shall not make without prior review and approval of the NREL Subcontract Administrator, any publicity release of any nature of general, non-technical information in connection with this subcontract. For purposes of this subcontract, general, non-technical information means any information concerning the existence of

the subcontract, the identity of the parties, and the scope and general character of the research or technical activity. As used in this Article, "publicity release" does not include a lawful inspection of the Subcontractor's records conducted pursuant to Federal or State public records access statutes. The Subcontractor may report specifics regarding the formation and execution of this subcontract in its internal publications without prior review and approval of the NREL Subcontract Administrator.

B. Data rights are set forth in Appendix C hereof. The Subcontractor should particularly note that all papers and documents that are required for submittal and distribution for patent clearance under this subcontract should first be submitted to the Department of Energy, Intellectual Property Law Division, Chicago Operations Office, 9800 South Cass Avenue, Argonne, Illinois 60439 prior to distribution to the public. This requirement of patent clearance prior to publication of all Subcontractor's reports is specifically required and set forth in Appendix C hereof.

ARTICLE 11 - WASTE DISPOSAL

In accordance with the clause entitled "Cleaning Up" of Appendix B-10 the Subcontractor shall be responsible for maintaining a clean and neat construction site and for removing and disposing of all scrap and waste (including any hazardous or toxic material) from the construction site in accordance with all applicable laws or regulations at no additional cost to NREL. The Subcontractor shall be responsible for disposing of all excess soil or waste material from excavations made by the Subcontractor, unless otherwise specified in this subcontract.

ARTICLE 12 - SAFETY AND HEALTH REQUIREMENTS (Special – April 2004)

- A. The Subcontractor shall be responsible for ensuring that all work performed under this subcontract is performed in a safe and orderly manner so as not to create a hazard to health and property. The Subcontractor shall be responsible for full compliance (inclusive of its lower-tier subcontractors) with all applicable safety standards of DOE, under which the 29 CFR 1926 and 29 CFR 1910 standards are considered to be the primary standards, and specific safety standards of NREL. Specific health hazards are identified in NREL's Preliminary Hazard Analysis Document.
- B. NREL may inspect the Subcontractor's operation as work proceeds, from time to time, for compliance with health and safety requirements contained in this subcontract. The NREL Subcontract Administrator shall direct the Subcontractor to make the necessary corrections commensurate with the deficiencies found, and the Subcontractor shall make these corrections at no additional cost to NREL. The NREL Project Manager and other cognizant representatives from NREL Site Operations, NREL ES&S, and the Department of Energy/Golden Field Office have authority to immediately stop work if unsafe conditions exist. The Subcontractor's violation, refusal, or failure to abate violations or applicable deficiencies may be justification for subcontract termination in accordance with the clause entitled "Default-Fixed Price Construction" of Appendix B
- C. The Subcontractor shall complete and post the Form DOE-F-5480.4 at the work site. The Subcontractor shall make available Form DOE-F-5480.4, "[Sub]Contractor Employee Occupational Safety or Health Complaint" to its employees. The Subcontractor shall maintain specific records and submit the following information covering experience of both its direct employees and that of its lower-tier subcontractors:

The Subcontractor shall immediately provide to the NREL Project Manager notification of any injury or property damage incident and provide sufficient information necessary for NREL to complete DOE-F-5484.3 "The Individual Accident/Incident Report."

The above information shall be submitted, as appropriate, for any period of time not covered by routine quarterly submittals prior to final payment and closeout of this subcontract.

ARTICLE 13 - PROGRESS MEETINGS AND REPORTS (Apr 2004)

- A. <u>Preconstruction Meeting</u>: A meeting shall be conducted within one (1) week after receipt of the notice to proceed for this subcontract. The Subcontractor and its principal lower-tier subcontractors, if any, shall attend this meeting. The purpose of the meeting is to coordinate all aspects of the construction project including the construction schedule and the special requirements for environmental, safety and security associated with performance of the construction project on a Government-owned or leased facility.
- B. <u>Daily Log Reports</u>: The Subcontractor shall prepare, and require its lower-tier subcontractors to prepare, daily reports to be kept on file until subcontract closeout, recording all construction activities at the construction project site including any safety issues or concerns. The NREL Subcontract Administrator or the NREL Project Manager may review these daily log reports, as requested, and may require the Subcontractor to submit two (2) copies of any daily log report to NREL (one copy for the Subcontract Administrator and one copy for the Project Manager).
- C. <u>Verbal Reports</u>: The Subcontractor shall provide verbal reports to the NREL Project Manager, as requested, to ensure that NREL is informed of all progress made and any problems that might cause a delay in the completion of this construction project. These verbal reports will ensure that NREL is afforded the opportunity to take appropriate action to avoid or mitigate any problems as they arise under the construction project.
- D. <u>Progress Meetings Upon Request</u>: The Subcontractor shall be required to attend construction progress meetings, as considered necessary and requested by NREL. The Subcontractor shall ensure that any of its lower-tier subcontractors also attend these meetings, as required. The purpose of these meetings shall be to review current and proposed work schedules and progress, discuss and resolve construction problems, and resolve administrative matters.

ARTICLE 14 - EXISTING SERVICES AND UTILITIES

- A. The term "services and utilities" as used herein is defined as including, but not limited to, roads, ditches, electrical, sewer, water, fencing, etc.
- B. The locations of existing underground services and utilities, if applicable to the performance of work under this subcontract, as indicated on the drawings are approximate.
- C. The Subcontractor shall be responsible for the actual necessary connection(s) to any existing service or utility required in the performance of this subcontract.
- D. No outage will be permitted without prior consent of the NREL Project Manager. The Subcontractor shall coordinate with NREL's Project Manager five (5) full NREL normal working days prior to any approved interruption of existing services and utilities required in performance of this subcontract. Interruption of existing services and utilities includes, but is not limited to,

existing equipment, piping, electrical service or other utilities, which must be disconnected, shut off, relocated or otherwise modified. The Subcontractor shall be responsible for reconnecting and restoring to the original operating conditions any equipment that was disconnected or put out of service as a result of any interruption, unless otherwise specified by this subcontract. If significant fire protection system(s) will be impaired longer than eight (8) hours, specific approval shall be obtained from the NREL Project Manager, who shall coordinate with NREL Safety and Security Office. The Subcontractor shall attach a safety tag to the device which "kills" the service (breakers, etc.) and lock or otherwise secure the device in the "off" position so as to prevent accidental reactivation. All utilities tie-in costs and premium time, if any, shall be included in the total subcontract price.

ARTICLE 15 - TEMPORARY STRUCTURES, OFFICES AND WORK AREAS

- A. The Subcontractor shall be responsible for providing at its own expense, all temporary structures, utilities, and services required by it for use as offices, warehouses, shops, etc. The location and type of any temporary structure shall be approved and coordinated with the NREL Project Manager. Such temporary structures shall be removed by the Subcontractor at its own expense upon the completion of the construction effort. The Subcontractor shall hold and save NREL and the Government, their officers, employees, and agents free and harmless from liability of any nature associated herewith.
- B. Only materials, appliances, and plans to be used for the performance of the subcontract work may be stored in stockpile areas or in warehouses and shop facilities (whether erected by the Subcontractor or not) located on Government-controlled land. If the Subcontractor abandons the performance of the subcontract work or if the Subcontractor's right to proceed is terminated pursuant to the clause entitled "Default (Fixed Price Construction)," the Subcontractor shall hold and save NREL and the Government and their officers and agents free and harmless from any liability of any nature or kind, arising from NREL's or the Government's entry into such stockpile areas, warehouses, or shop facilities and from NREL's or the Government's taking possession of and utilizing such materials, appliances, and plant in completing the subcontract work.
- C. All operations of the Subcontractor, including storage of construction materials and equipment, upon Government premises shall be confined to areas authorized or approved by NREL. No unauthorized or unwarranted entry upon or passage through, or storage or disposal of materials shall be made upon Government premises. The Subcontractor shall hold and save NREL and the Government, its officers and agents free and harmless from liability of any nature or kind arising from any use, trespass, or damage occasioned by its operations on premises of third persons.
- D. The Subcontractor shall use only established roadways or construct and use such temporary roadways as may be authorized by NREL. Where materials are transported in the prosecution of the work, vehicles shall not be loaded beyond the loading capacity recommended by the manufacturer of the vehicles or prescribed by an applicable Federal, state, or local law or regulation. When it is necessary to cross curbings or sidewalks or to operate heavily loaded vehicles on surfaced streets, sidewalks or developed areas, protection against damage shall be provided by the Subcontractor, and any damaged roads, curbings, sidewalks or developed areas shall be repaired by, or at the expense of the Subcontractor.
 - D. The Subcontractor shall provide and maintain during the entire period covered by this subcontract a weather-tight bulletin board approximately 7 feet high by 8 feet long. It shall be mounted in a conspicuous place, as approved by the Project Manager, accessible to all employees of the

Subcontractor and lower-tier subcontractors. The bulletin board will remain the property of the Subcontractor. All NREL or Government posters or notices, the subcontract's Davis-Bacon Wage Rate decision, Subcontractor's safety programs, and any publications in the interest of workmen shall be displayed on this bulletin board.

ARTICLE 16 - RESPONSIBILITIES FOR SUPPLIES AND MATERIALS

Except as otherwise provided in this subcontract, the risk of loss of or damage to supplies or materials for the performance of this construction project shall remain with the Subcontractor until completion, inspection and acceptance of the construction project or completion, inspection and acceptance of any segregable unit of the construction project.

ARTICLE 17 – LIQUIDATED DAMAGES – CONSTRUCTION (Sept 2000)

- A. If the Subcontractor fails to substantially complete the work by ****, ****, the Subcontractor shall pay liquidated damages to NREL in the amount of "******** and no cents" (\$*****.00) for each calendar day of delay until the work is substantially completed or accepted.
- B. If NREL terminates the Subcontractor's right to proceed, liquidated damages will continue to accrue until the work is completed. These liquidated damages are in addition to excess costs of repurchase under the Termination clause.

ARTICLE 18 – TIME EXTENSIONS (Sept 2000)

Time extensions for changes under subcontract modifications will depend upon the extent, if any, by which the changes cause delay in the completion of the various elements of construction. The subcontract modification granting the time extension may provide that the subcontract completion date will be extended only for those specific elements related to the changed work and that the remaining subcontract completion dates for all other portions of the work will not be altered. The subcontract modification also may provide an equitable readjustment of liquidated damages under the new completion schedule.

ARTICLE 19 – (LOWER TIER) SUBCONTRACTS (LABOR STANDARDS) (Feb 1988)

- A. The Subcontractor or lower-tier subcontractor shall insert in any lower-tier subcontracts the clauses entitled Davis-Bacon Act, Contract Work Hours and Safety Standards Act -- Overtime Compensation, Apprentices and Trainees, Payrolls and Basic Records, Compliance with Copeland Act Requirements, Withholding of Funds, Lower-Tier Subcontracts (Labor Standards), Subcontract Termination -- Debarment, Disputes Concerning Labor Standards, Compliance with Davis-Bacon and Related Act Regulations, and Certification of Eligibility, and such other clauses as the NREL Subcontract Administrator may, by appropriate instructions, require, and also a clause requiring lower-tier subcontractors to include these clauses in any sub-tier subcontracts. The Subcontractor shall be responsible for compliance by any lower-tier subcontractor with all the clauses cited in this paragraph.
 - Within fourteen (14) days after award of the subcontract, the Subcontractor shall deliver to the NREL Subcontract Administrator a completed Statement and Acknowledgment Form (SF 1413) for each lower-tier subcontract, including the lower-tier subcontractor's signed and dated acknowledgment that the clauses set forth in paragraph (a) of this clause have been included in the lower-tier subcontract.

2. Within fourteen (14) days after the award of any subsequently awarded lower-tier subcontract the Subcontractor shall deliver to the NREL Subcontract Administrator an updated completed SF 1413 for such additional lower-tier subcontract.

ARTICLE 20 – PERFORMANCE AND PAYMENT BONDS – CONSTRUCTION

A. *Definitions*. As used in this clause --

"Original contract price" means the award price of the contract; or, for requirements contracts, the price payable for the estimated total quantity; or, for indefinite-quantity contracts, the price payable for the specified minimum quantity. Original contract price does not include the price of any options, except those options exercised at the time of contract award.

- B. <u>Amount of required bonds</u>. Unless the resulting contract price is \$100,000 or less, the successful offeror shall furnish performance and payment bonds to the Subcontract Administrator as follows:
 - 1. <u>Performance Bonds</u>. The penal amount of performance bonds at the time of contract award shall be 100 percent of the original contract price.
 - 2. <u>Payment Bonds.</u> The penal amount of payment bonds at the time of contract award shall be 100 percent of the original contract price.
 - *3. Additional bond protection.*
 - (a) NREL may require additional performance and payment bond protection if the contract price is increased. The increase in protection generally will equal 100 percent of the increase in contract price.
 - (b) NREL may secure the additional protection by directing the Subcontractor to increase the penal amount of the existing bond or to obtain an additional bond.
- C. <u>Furnishing executed bonds</u>. The Subcontractor shall furnish all executed bonds, including any necessary reinsurance agreements, to the NREL Subcontract Administrator, within the time period specified in the Bid Guarantee provision of the solicitation, or otherwise specified by the NREL Subcontract Administrator, but in any event, before starting work.
- D. <u>Surety or other security for bonds</u>. The bonds shall be in the form of firm commitment, supported by corporate sureties whose names appear on the list contained in Treasury Department Circular 570, individual sureties, or by other acceptable security such as postal money order, certified check, cashier's check, irrevocable letter of credit, or, in accordance with Treasury Department regulations, certain bonds or notes of the United States. Treasury Circular 570 is published in the *Federal Register* or may be obtained from the:

U.S. Department of Treasury Financial Management Service Surety Bond Branch 401 14th Street, NW, 2nd Floor, West Wing Washington, DC 20227 E. <u>Notice of lower-tier subcontractor waiver of protection (40 U.S.C. 270b(c))</u>. Any waiver of the right to sue on the payment bond is void unless it is in writing, signed by the person whose right is waived, and executed after such person has first furnished labor or material for use in the performance of the contract.

ARTICLE 21 – PERFORMANCE OF WORK BY THE SUBCONTRACTOR

The Subcontractor shall perform on the site, and with its own organization, work equivalent to at least twenty-five (25) percent of the total amount of work to be performed under the subcontract. This percentage may be reduced by a modification to this subcontract if, during performing the work, the Subcontractor requests a reduction and the NREL Subcontractor Administrator determines that the reduction would be to the advantage of NREL.

ARTICLE 22 - SCHEDULES FOR CONSTRUCTION SUBCONTRACTS

- A. The Subcontractor shall, within five (5) work days after the work commences on the subcontract or another period of time determined by the NREL Subcontract Administrator, prepare and submit to the NREL Subcontract Administrator for approval three copies of a practicable schedule showing the order in which the Subcontractor proposes to perform the work, and the dates on which the Subcontractor contemplates starting and completing the several salient features of the work (including acquiring materials, plant, and equipment). The schedule shall be in the form of a progress chart of suitable scale to indicate appropriately the percentage of work scheduled for completion by any given date during the period. If the Subcontractor fails to submit a schedule within the time prescribed, the NREL Subcontract Administrator may withhold approval of progress payments until the Subcontractor submits the required schedule.
- B. The Subcontractor shall enter the actual progress on the chart as directed by the NREL Subcontract Administrator, and upon doing so shall immediately deliver three copies of the annotated schedule to the NREL Subcontract Administrator. If, in the opinion of the NREL Subcontract Administrator, the Subcontractor falls behind the approved schedule, the Subcontractor shall take steps necessary to improve its progress, including those that may be required by the NREL Subcontract Administrator, without additional cost to NREL. In this circumstance, the NREL Subcontract Administrator may require the Subcontractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules in chart form as the NREL Subcontract Administrator deems necessary to demonstrate how the approved rate of progress will be regained.
- C. Failure of the Subcontractor to comply with the requirements of the NREL Subcontract Administrator under this clause shall be grounds for a determination by the NREL Subcontract Administrator that the Subcontractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the subcontract. Upon making this determination, the NREL Subcontract Administrator may terminate the Subcontractor's right to proceed with the work, or any separable part of it, in accordance with the default terms of this subcontract.

ARTICLE 23 - LAYOUT OF WORK

The Subcontractor shall lay out its work from NREL established base lines and bench marks indicated on the drawings, and shall be responsible for all measurements in connection with the layout. The Subcontractor shall furnish, at its own expense, all stakes, templates, platforms, equipment, tools, materials, and labor required to lay out any part of the work. The Subcontractor shall be responsible for executing the work to the lines and grades that may be established or indicated by NREL. The Subcontractor shall also

be responsible for maintaining and preserving all stakes and other marks established by NREL until authorized to remove them. If such marks are destroyed by the Subcontractor or through its negligence before their removal is authorized, NREL may replace them and deduct the expense of the replacement from any amounts due or to become due to the Subcontractor.

ARTICLE 24 - SMALL BUSINESS (Lower Tier) SUBCONTRACTING PLAN

The subcontractor's Small Business (Lower-tier) Subcontracting Plan dated * is hereby incorporated as Appendix * in this subcontract. The Subcontractor hereby agrees to submit the "Subcontracting Report for Individual Contracts" (Standard Form 294) semi-annually during subcontract performance for the periods ended March 31st and September 30th, based on the Government's fiscal year (October 1 through September 30). A separate report is required at subcontract completion in accordance with the instructions on the form. The "Subcontracting Report for Individual Contracts" is due on or before the twenty-fifth (25th) day of the month following the close of the applicable period. The Subcontractor shall also submit the "Summary Subcontract Report" (Standard Form 295) annually for the twelve months ended September 30th, at the close of each Government fiscal year and in accordance with the instructions on the form. The original plus two (2) copies of these reports shall be submitted to the subcontract administrator.

The reports shall be sent to the following address:

National Renewable Energy Laboratory ATTN: [Subcontract Administrator] Contracts and Business Services 1617 Cole Boulevard Golden, CO 80401-3393

ARTICLE 25 - ALTERATIONS TO TERMS AND CONDITIONS

A. Appendix B-10, Standard Terms and Conditions, Clause **. - Insurance-Work on a Government Installation (Special) (May 2003), is hereby modified to delete paragraph A and replace it with the following:

The Subcontractor shall, at its own expense, provide and maintain during the entire performance period of this subcontract at least the kinds and minimum amounts of insurance required in this clause.

Architect/Engineer Professional Liability and Errors and Omissions Insurance shall be provided and maintained during the entire performance period of the subcontract and for 5 years after the completion of the work.

"All Risk" Builder's Risk Insurance shall be obtained and maintained in the names of the U.S. Department of Energy and NREL upon the entire structure or structures on which the work of this subcontract is to be done and all material in or adjacent thereto that is intended for use thereon to one hundred percent (100%) of the insurable value thereof. Such insurance may include a deductible provision in which case the Subcontractor will be liable for such deductions, whenever a claim arises. The loss, if any, is to be made adjustable with and payable to the U.S. Department of Energy, in accordance with its interests, as they may appear. The U.S. Department of Energy and NREL, their officers, employees, and agents shall be listed as additional insured in any policy of insurance issued.

Insurance Type	Bodily Injury	Property Damage
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	Each Person	Each Occurrence	
Workers Compensation	as required by law	as required by law	N/A
Employer's Liability	\$1,000,000.00	\$1,000,000.00	\$1,000,000.00
Commercial General Liability	\$2,000,000.00	\$5,000,000.00	\$5,000,000.00
Automobile Liability	\$500,000.00	\$1000,000.00	\$1000,000.00

Insurance Type	Per Claim	Aggregate claims
Architect/Engineer Professional liability and Errors and Omissions	\$2,000,000.00	\$6,000.000.00
"All Risk" Builder's Risk	100% structure & material value (Subcontractor responsible for any deductible amount)	100% structure and material value (Subcontractor responsible for any deductible amount)

D. Appendix C-3, Intellectual Property Provisions for Large and Small Business, Nonprofit Organizations, Educational Institutions and Others (Non Research and Development) is hereby modified to delete Clause 4. Rights in Data – General and replace it with the following:

CLAUSE 4 – RIGHTS IN DATA – SPECIAL WORKS

A. Definitions.

"Data," as used in this clause, means recorded information regardless of form or the medium on which it may be recorded. The term includes technical data and computer software. The term does not include information incidental to subcontract administration, such as financial, administrative, cost or pricing or management information.

"Unlimited rights," as used in this clause, means the right of NREL/Government to use, disclose, reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, in any manner and for any purpose whatsoever, and to have or permit others to do so.

B. Allocation of Rights.

- 1. The Government shall have --
 - (i) Unlimited rights in all data delivered under this subcontract, and in all data first produced in the performance of this subcontract, except as provided in paragraph C of this clause for copyright.
 - (ii) The right to limit exercise of claim to copyright in data first produced in the performance of this subcontract, and to obtain assignment of copyright in such data, in accordance with subparagraph C (1) of this clause.
 - (iii) The right to limit the release and use of certain data in accordance with paragraph D of this clause.

- 2. The Subcontractor shall have, to the extent permission is granted in accordance with subparagraph C (1) of this clause, the right to establish claim to copyright subsisting in data first produced in the performance of this subcontract.
- C. Copyright
 - 1. Data first produced in the performance of this subcontract.
 - (i) The Subcontractor agrees not to assert, establish, or authorize others to assert or establish, any claim to copyright subsisting in any data first produced in the performance of this subcontract without prior written permission of the DOE Contracting Officer. When claim to copyright is made, the Subcontractor shall affix the appropriate copyright notice of 17 U.S.C. 401 or 402 and acknowledgment of NREL/Government sponsorship (including subcontract number) to such data when delivered to NREL/Government, as well as when the data are published or deposited for registration as a published work in the U.S. Copyright Office. The Subcontractor grants to NREL/Government, and others acting on its behalf, a paid-up nonexclusive, irrevocable, worldwide license for all such data to reproduce, prepare derivative works, distribute copies to the public, and perform publicly and display publicly, by or on behalf of the Government.
 - (ii) If the Government desires to obtain copyright in data first produced in the performance of this subcontract and permission has not been granted as set forth in subdivision C (1)(i) of this clause, the DOE Contracting Officer may direct the Subcontractor to establish, or authorize the establishment of, claim to copyright in such data and to assign, or obtain the assignment of, such copyright to the Government or its designated assignee.
 - 2. Data not first produced in the performance of this subcontract. The Subcontractor shall not, without prior written permission of the DOE Contracting Officer, incorporate in data delivered under this subcontract any data not first produced in the performance of this subcontract and which contain the copyright notice of 17 U.S.C. 401 or 402, unless the Subcontractor identifies such data and grants to the Government, or acquires on its behalf, a license of the same scope as set forth in subparagraph C (1) of this clause.
- B. <u>Release and use restrictions</u>. Except as otherwise specifically provided for in this contract, Subcontractor shall not release, reproduce, distribute, or publish any data first produced in the performance of this subcontract, nor authorize others to do so, without written permission of the DOE Contracting Officer.
 - E. <u>Indemnity.</u> The Subcontractor shall indemnify NREL and the Government and its officers, agents, and employees acting for NREL or the Government against any liability, including costs and expenses, incurred as the result of the violation of trade secrets, copyrights, or right of privacy or publicity, arising out of the creation, delivery, publication, or use of any data furnished under this subcontract; or any libelous or other unlawful matter contained in such data. The provisions of this paragraph do not apply unless NREL/Government provides notice to the Subcontractor as soon as practicable of any claim or suit, affords the Subcontractor an opportunity under applicable laws, rules, or regulations to participate in the defense thereof, and obtains the Subcontractor's consent to the settlement of any suit or claim other than as required by final decree of a court of competent jurisdiction; nor do

these provisions apply to material furnished to the Subcontractor by the NREL/Government and incorporated in data to which this clause applies."

ARTICLE 26 – INTEGRATION

This subcontract contains the entire understanding between the parties, and there are no understandings or representations except those set forth or incorporated by reference herein. No subsequent modifications of this subcontract shall be of any force or effect unless in writing signed by a duly authorized official of NREL.

IN WITNESS WHEREOF, the parties hereto have executed this subcontract as of the date fully signed below.

ACCEPTED: *	AUTHORIZED: MIDWEST RESEARCH INSTITUTE NATIONAL RENEWABLE ENERGY LABORATORY DIVISION
BY:	BY:
TITLE:	TITLE:
DATE:	DATE: